

Ferrite Plates for Wireless Charging MP & 33 Series



# FEATURES **VROHS**

- Ferrite materials are Wireless Power Consortium(WPC) listed, recommended & certified for interoperability test
- Optimized for highest charging efficiency
- Precise dimension control and automotive grade available
- $-40^{\circ}$ C to  $125^{\circ}$ C operating temperature
- Available in wide range of size selection, custom shapes are also available

**DIMENSIONS** 

## APPLICATIONS

- Wireless charger for general consumer electronics,transmitter(TX) or receiver(RX)
- Aftermarket charging pads
- Wireless charger for Office,Residential, and Public Area applications
- Wireless charger embedded solution for automobile central console, arm-rest...ect.
- Power tools or any industrial devices that need power transmission without metallic contact

PART NUMBER	A mm (inches)	B mm (inches)	C mm (inches)	Fig #	
MP1040-3M0	26.42	26.42	2.25	1	
	(1.040)	(1.040)	(0.089)	I	
MP1496-0M0	38.00	38.00	2.00	1	
	(1.496)	(1.496)	(0.079)	I	
MP2106-0M0	53.00	53.00	2.50	1	
	(2.087)	(2.087)	(0.099)	I	
MP2126-0M0	53.80	53.80	1.10	1	
	(2.118)	(2.118)	(0.043)	I	
MP2170-1M0	47.20	55.20	2.50	1	
	(1.858)	(2.173)	(0.099)		
MP3940-0M0	100.00	56.00	1.10	1	
	(3.937)	(2.205)	(0.043)	I	
33P2098-0M0	53.30	53.30	2.50	1	
	(2.099)	(2.099)	(0.099)	I	
33P3839-0M0	97.50	50.00	1.10	2	
	(3.839)	(1.969)	(0.043)	2	



USA: +1.423.308.1690 Europe: +42.0.4885.7511.1 Asia: +86.757.2563.8860

#### MCP-DS-PLATES REV1.1 0714

Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird Technologies materials rests with the end user, Laird Technologies makes no warranties as to the fitness, merchantability, subability or non- infringement of any Laird Technologies materials or products for any specific or general uses, Laird Technologies materials or indential or or systemic or general uses. Laird Technologies should be used to the fitness, merchantability, subability or non- infringement of any Laird Technologies materials or Technologies should be used to the lines of the indential or consequential damages of any ticnhologies. The chandogies should be used to the line of the indential or consequential damages of any ticnhologies. Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2014 Laird Technologies should be used to the transfer or registred trademarks or fail technologies is on a difficient or a filtate company thereof. Other product or service names may be the property of third parkes. Nothing herein provides a license under any Laird licent apart just technologies on any time of Laird park interflex to AD (and the park) is the transfer of the product or service names may be the property of third parks. Nothing herein provides a license under any Laird Technologies or any time of the park interflex ton AD (and the park) and the company thereof.

www.lairdtech.com



Ferrite Plates for Wireless Charging MP & 33 Series

### PART NUMBER SYSTEM EXAMPLE

<u>33</u>	<u>P</u>	<u>2098</u> -	<u>0M0</u>
M-28 Material	Plate	Part Size Code	Thickness Code
33-33 Material			Catalog or Custom Information
MATERIAL	SPEC	IFICATIONS	

Property	Symbol	Unit	28 Material (WPC Listed)	33 Material
Initial Permeability	$\mu_i$		650	2300
Flux Density	В	mT [Gauss]	280 [2800]	390 [3900]
@ Field Strength	Н	A/m [Oe]	800 [10]	800 [10]
Residual Field Strength	$B_r$	mT [Gauss]	130 [1300]	55 [550]
Coercive Strength	$H_c$	A/m [Oe]	32 [0.4]	9 [0.1]
Locs Factor @ Fraguency	$tan \delta/\mu_i$	$10^{-6}$	500	6
Loss Factor @ Frequency	f	MHz	0.1	0.1
Curie Temperature	$T_c$	°C	> 140	> 200
Resistivity	ρ	Ω-cm	10 <sup>5</sup>	5x10 <sup>2</sup>

# TYPICAL ELECTRICAL CHARACTERISTICS





### **33 MATERIAL**

**28 MATERIAL** 



### Initial Permeability vs Temperature



USA: +1.423.308.1690 Europe: +42.0.4885.7511.1 Asia: +86.757.2563.8860

#### MCP-DS-PLATES REV1.1 0714

Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird Technologies materials rests with the end user. Laird Technologies makes no warranties as to the fitness, merchantability, suitability or non- infringement of any Laird Technologies materials or products for any specific or general uses. Laird Technologies shall not be liable for indential or consequential damages of any kind. All Laird Technologies functions are subject to change without notice. Responsibility for the use and application technologies (Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2014 Laird Technologies (Inc. and Affliate Company thereof). Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird Laird park intellectual property rights. Version A01